IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Attorney Docket No. Adler 01.01

In re application of: Richard M. Adler

Serial No.:	10/091,859	Group Art Unit:	3639
Filed:	03/06/02	Examiner:	Nathan Erb
Matter No.:	1099.001	Phone No.:	571-272-7606

For: System and Computer-Implemented Method for Modeling and Analyzing
        Strategic Decisions

APPELLANT'S REPLY BRIEF UNDER 37 CFR 41.41

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22213-1450

Dear Sir:

     In response to the Examiner's Answer filed on May 30, 2007, Appellant/Applicant

submits the following Reply Brief in support of the appeal:

The Examiner's Answer highlights the Examiner's numerous errors of law, fact, and reasoning, all of which stem from the Examiner's improper application of and unreasonable interpretation of U.S. Patent No. 6,321,205 ("Eder"). While the discussion below specifically addresses only certain examples of the Examiner's errors, the Appellant maintains all of the arguments previously submitted in Appellant's Brief, including those not specifically discussed herein.

Claims 64-68, 73-81, 89, 90, and 99-105 Are Novel Over Eder

Claim 64 recites that the model of the decision domain is constructed based on a received "selection of a predefined model from among a plurality of predefined models of decision domains." In support of his rejection of claim 64 (at the top of page 27 of the Examiner's Answer), the Examiner essentially argues that this plain language of claim 64 should be ignored. Even though Eder does not disclose the use of a plurality of predefined models, nor a selection from among a plurality of predefined models, the Examiner nevertheless argues that "the decision domain chosen could merely be a single decision domain offered by the program, which was chosen from a plurality of possible alternative decision domains known but not included as choices within the program." This construction of the plain language of claim 64 and this interpretation of Eder are tortured and defy both logic and well-established law.

It is elemental that, under 35 U.S.C. §102, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner's stated hypothetical that "the decision

domain chosen *could* merely be..." is a fabrication by the Examiner of subject matter that does not appear in Eder and is not suggested or supported anywhere in Eder. Eder clearly does not disclose a "selection of a predefined model from among a plurality of predefined models of decision domains," which is an element of claim 64. Since each and every element of claim 64 is not found in Eder, Eder simply cannot anticipate claim 64.

Claim 64 also recites steps of "(a) constructing a model of a decision domain <u>for creating a plurality of scenarios</u> in the decision domain," and "(b) receiving user-specified (i) <u>baseline scenario parameters defining a baseline scenario</u>, (ii) <u>scenario parameters defining one or more alternative scenarios</u>." Claim 64 also recites that "<u>each scenario depicts a situation in the decision domain for which one or more candidate decisions potentially affecting the corresponding scenario parameters could be adopted</u>," and that "<u>each of the one or more alternative scenarios represents a possible future into which the baseline scenario could evolve</u>." Claim 64 further recites steps of "(c) simulating, for one or more future time instants, <u>each of the one or more alternative scenarios</u> as influenced by (i) each candidate decision represented by the candidate decision parameters and (ii) <u>parameters characterizing assumptions in alternative scenarios</u>," and "(d) for each candidate decision represented by the candidate decision parameters, outputting simulation results <u>based on the alternative scenario parameters corresponding to the simulated alternative scenarios</u> at one or more future time instants." Eder does not disclose ANY of the foregoing recitals of claim 64.

In support of his rejection of claim 64, the Examiner argues (at the first full paragraph on page 27 of the Examiner's Answer) that Eder "does indeed address the analysis of multiple scenarios." However, Eder does not disclose more than a single scenario, and the Examiner is disingenuous in arguing that Eder "does indeed address the analysis of multiple scenarios." In

fact, the Examiner admits that "Eder does not necessarily disclose analyzing several scenarios simultaneously," but then asserts that Eder "does specify a program which can be run multiple times, with a different scenario defined each time. Therefore, Eder does disclose addressing multiple scenarios." Once again, the Examiner is not only misconstruing and unreasonably interpreting this reference, but also is simply fabricating subject matter that does not appear in Eder and is not suggested or supported anywhere in Eder. Step (a) of claim 64 clearly recites "a model of a decision domain <u>for creating a plurality of scenarios</u> in the decision domain." As admitted by the Examiner, Eder discloses no model of a decision domain that includes a plurality of scenarios, and in order to compensate for this deficiency of Eder, the Examiner fabricates a situation in which Eder's software could "be run multiple times." What the Examiner is essentially arguing here is akin to using a pair of scissors to improperly reject a claim for a lawn mower, since the scissors could hypothetically be used repeatedly to cut an entire lawn. Such an argument is wholly without merit. Eder simply does not disclose a baseline scenario and one or more alternative scenarios, wherein "<u>each of the one or more alternative scenarios represents a possible future into which the baseline scenario could evolve</u>," as recited in claim 64. Nor does Eder meet any of the other recitals of claim 64 that involve a baseline scenario and one or more alternative scenarios. For similar reasons, claims 104 and 105 are novel over Eder. Since claims 65-68, 73-81, 89, 90, and 99-103 depend from claim 64, it is further submitted that those claims are also novel over Eder.

Claims 106-110 and 112-114 Are Novel Over Eder

　　　　Claim 106 recites, *inter alia*, "(a) constructing a decision model of the decision domain for creating <u>a plurality of scenarios</u> in the decision domain" and "(d) <u>compiling the application</u>

database and the specifications to generate the decision-support application, wherein the decision-support application is executable under the decision-support simulator framework."

First, the "plurality of scenarios" recited in claim 106 is nowhere disclosed in Eder, as fully discussed above with reference to claim 64. The Examiner (at the first full paragraph of page 28 of the Examiner's Answer) is, once again, not only misconstruing and unreasonably interpreting this reference, but also is fabricating subject matter (i.e., a situation in which Eder's software could "be run multiple times") that does not appear in Eder and is not suggested or supported anywhere in Eder.

Second, Eder fails to disclose the compiling of an application database and specifications to generate an executable decision-support application. The Examiner argues (at the first full paragraph of page 28 of the Examiner's Answer) that "this is disclosed by Eder in that this step would have to be performed to arrive at the program in Eder which is capable of the functions of that program disclosed by Eder," concluding that "while perhaps other applications could be created under the method of claim 106, the language of claim 106 still embraces the disclosure of Eder, and Eder anticipates claim 106." This is another unreasonable interpretation of and misconstruction of Eder, and this argument simply defies logic. In the present invention, as claimed in claim 106, object and behavioral models can be created for many different decision domains, and these models are compiled to generate different decision-support applications that share a common framework of graphical user interfaces, simulation and analytics engines (much as spreadsheet engines such as Microsoft Excel support diverse independent financial and engineering models). Thus, the present application, as claimed in claim 106, provides a *generalized* platform for "running" (viz., modeling, simulating and analyzing) many different decision support models. In other words, the present invention, as claimed in claim 106, provides

a platform for creating and deploying diverse solutions tailored to any decision-making domain. The platform is used to build and compile executable applications using decision models specific to particular domains and decision problems, as well as specifications that can include arbitrary numbers and types of data structures having arbitrary values. The associated methodology of the present invention, as claimed in claim 106, is similarly generalized so that it can build and compile many different kinds of applications using this platform, to be able to deal with many different kinds of problems, including, e.g., structure of legislation, public policy, competitive strategy, change management, portfolio management, military strategy, and corporate governance" (e.g., as set forth in claim 119).

Quite to the contrary, Eder is explicitly tied to a single decision-making domain, i.e., financial valuation of a business, and is focused on supporting only this single kind of decision in this single domain. Eder teaches only a single executable financial-valuation software application written in a particular programming language, and there is no way in Eder to create and compile other applications for decision-making in other domains. There is simply no teaching in Eder that goes beyond a specific application to support the financial valuation of a business. Nowhere does Eder disclose or even suggest compiling one, much less multiple diverse application databases and specifications to generate executable decision-support applications. Rather, Eder teaches a single application defined by a single model that calculates and displays a forecast of the impact of user-specified or system-generated changes in business value drivers on other value drivers, elements, financial performance and long-term value of a commercial enterprise, based on information from a detailed valuation of the enterprise. Unlike the invention as recited in claim 106, which enables the creation of a custom application to assist in the decision-making process, Eder is limited to a single application for a single purpose,

whose specifications are set forth in the specification of Eder's patent application. The Examiner's suggestion that there might hypothetically be some implementation of Eder's invention that could involve compiling code is yet another fabrication of the Examiner, and not a teaching or suggestion of Eder.

Since Eder does not disclose (i) a plurality of scenarios in the decision domain, nor (ii) compiling an application database and specifications to generate an executable decision-support application, it cannot be said that Eder anticipates claim 106. For similar reasons, claims 113 and 114 are novel over Eder. Since claims 107-110 and 112 depend from claim 106, it is further submitted that those claims are also novel over Eder.

Claims 115, 116, and 119-121 Are Novel Over Eder

Claim 115 recites, *inter alia*:

(a) generating, based on user input, <u>a plurality of alternative scenarios representing possible evolutions of a baseline scenario</u>;

(b) generating, based on user input, a plurality of strategies for influencing the alternative scenarios;

(c) simulating outcomes <u>of each of the strategies for each of the alternative scenarios over time</u>; and

(d) providing output data, based on the simulated outcomes, to permit <u>comparison of the simulated outcomes for each of the strategies</u>.

As argued above with reference to claims 64-105, Eder fails to disclose the creation of a <u>plurality of alternative scenarios</u> in a decision domain. Eder also fails to disclose simulating outcomes of each of the strategies <u>for each of the alternative scenarios</u> over time, and Eder also fails to disclose providing output data, based on the simulated outcomes, as well as analytic capabilities,

to permit <u>comparison of the simulated outcomes for each of the strategies</u>. As argued previously, in Eder, there is no simulation of the projected outcomes of employing different strategies that influence each a plurality of alternative scenarios (as in step (c)) – there is only simulation of the projected outcome of employing different strategies for <u>a single scenario</u>. Because outcomes of only <u>a single scenario</u> are being projected in Eder, there is no provision of output data to permit comparison of simulated outcomes for each of the strategies (as in step (d)) – there is only the provision of output data of the simulation outcome for <u>a single scenario</u>. In the present invention, as claimed in claim 115, analytics are expressly designed to be able to compare output metrics of different strategies across different plausible scenarios (i.e., futures). These analytics are domain-independent -- for example, in a counterterrorism decision domain, <u>the present invention's generalized </u>analytics support comparison of decision model performance metrics such as numbers of deaths and injuries, primary and secondary economic costs, environmental, psychological and symbolic impacts, etc. These metrics are completely distinct from the metrics cited by Eder tied to corporate business performance. The comparative analytics generated by the present invention can be applied to determine the strategy that has the best outcomes across diverse scenarios of plausible futures.

Since Eder does not involve the use of different scenarios in a simulation, Eder cannot possibly permit comparing simulated outcomes for each of a plurality of strategies across different scenarios to identify the most robust strategy, in a single domain, much less across diverse (non-financial) domains.

Since Eder does not disclose (i) a plurality of alternative scenarios in the decision domain, nor (iii) simulating outcomes <u>of each of the strategies for each of a plurality of alternative scenarios over time</u>, nor (iv) providing output data, based on the simulated outcomes, to permit

comparison of the simulated outcomes for each of the strategies, it cannot be said that Eder

anticipates claim 115. For similar reasons, claims 120 and 121 are novel over Eder. Since

claims 116 and 119 depend from claim 115, it is further submitted that those claims are also

novel over Eder.

Claims 65, 67, 73-79, 100-103, 107, 110, 116, 119 are Novel over Eder

Claims 65, 67, 73-79, 100-103, 107, 110, 116, 119 all stand rejected as anticipated by

Eder. As discussed above with respect to the other claims rejected as anticipated by Eder, with

claims 65, 67, 73-79, 100-103, 107, 110, 116, 119 as well, the Examiner is improperly applying

and unreasonably construing Eder, fabricating teachings that do not exist in Eder, and making

other errors of fact, law, and reasoning. The Appellant respectfully asks that the Board

reasonably and carefully construe the plain language of these claims vis-à-vis Eder, based on the

arguments presented in Appellant's Appeal Brief, and find that none of these claims are, in fact,

anticipated by Eder.

Claims 70-72, 82, 86, 88, 92-94, 97, 111, 117, and 118 are Non-Obvious over Eder
and the Other Cited References

Claims 65, 67, 73-79, 100-103, 107, 110, 116, 119 all stand rejected as obvious over

Eder, alone or in combination with other references. Just as the Examiner has misconstrued

Eder, as fully discussed above, the Examiner has also misconstrued many of these other

references, and has further combined references which are not properly combinable to reject

these claims. The Appellant respectfully asks that the Board reasonably and carefully construe

the plain language of these claims vis-à-vis Eder and the other cited references, based on the

arguments presented in Appellant's Appeal Brief, and find that none of these claims are, in fact, obvious over the prior art.

For the foregoing reasons, the Appellant requests that this appeal be sustained, that the pending rejections be reversed, and that all claims pending in the application be allowed.

Respectfully submitted,

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